

TREC-IS 2019-B Notebook Evaluator v2.3
Run: rf-autothre (rf-autothre.run)

EVALUATION: Alertng Performance
Overall performance

```
> High Importance Alert Worth: -0.848126801152738
> Low Importance Alert Worth: -0.04303666873664525
> Accumulated Alert Worth: -0.4455817349446916
```

EVALUATION: Information Type Categorization
Overall performance

```
> Information Type Precision (positive class, multi-type, macro): 0.17320119420260197
> Information Type Recall (positive class, multi-type, macro): 0.11219445244739745
> Information Type F1 (positive class, multi-type, macro): 0.1000214438477614
> Information Type Accuracy (overall, multi-type, macro): 0.8910630075975897
> High Importance Information Type Precision (positive class, multi-type, macro): 0.03382663847780127
> High Importance Information Type Recall (positive class, multi-type, macro): 0.07555555555555556
> High Importance Information Type F1 (positive class, multi-type, macro): 0.044230426252898164
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9719238494454632
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.21965937944420222
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.12440741807801141
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.11861844971271582
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8641093936482984
```

EVALUATION: Information Priority Level
Overall Performance

```
> Priority Estimation Error (mean squared error, macro): 0.09417720707014167
> Priority Estimation Error High Importance (mean squared error, macro): 0.18897548792790228
> Priority Estimation Error Low Importance (mean squared error, macro): 0.06257778011755477
```

LATEX

```
rf-autothre & -0.8481 & -0.4456 & 0.0442 & 0.1136 & 0.8911 & 0.1890 & 0.0942 \\
```

TREC-IS 2019-B Notebook Evaluator v2.3
Run: rf-autothre (rf-autothre.run)

EVALUATION: Information Type Categorization (Multi-type)
Per Event Performance

floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.0055402930402930406
Information Type Recall (positive class, multi-type, macro): 0.04166666666666664
Information Type F1 (positive class, multi-type, macro): 0.008752942963469278
Information Type Accuracy (overall, multi-type, macro): 0.910668380462725
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9704370179948586
Low Importance Information Type Precision (positive class, multi-type, macro): 0.007387057387057387
Low Importance Information Type Recall (positive class, multi-type, macro): 0.05555555555555555
Low Importance Information Type F1 (positive class, multi-type, macro): 0.011670590617959038
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.890745501285347

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.1055212148962149
Information Type Recall (positive class, multi-type, macro): 0.09722960469328294
Information Type F1 (positive class, multi-type, macro): 0.08489314168819984
Information Type Accuracy (overall, multi-type, macro): 0.9104330708661417
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9816272965879266
Low Importance Information Type Precision (positive class, multi-type, macro): 0.14069495319495318
Low Importance Information Type Recall (positive class, multi-type, macro): 0.12963947292437725
Low Importance Information Type F1 (positive class, multi-type, macro): 0.11319085558426645
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8867016622922136

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.17355126303308563
Information Type Recall (positive class, multi-type, macro): 0.10056528732325032
Information Type F1 (positive class, multi-type, macro): 0.10039011295440076
Information Type Accuracy (overall, multi-type, macro): 0.902059773828756
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9884221863220248
Low Importance Information Type Precision (positive class, multi-type, macro): 0.23140168404411415
Low Importance Information Type Recall (positive class, multi-type, macro): 0.13408704976433375
Low Importance Information Type F1 (positive class, multi-type, macro): 0.13385348393920102
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8732723029976664

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.16084398608860342
Information Type Recall (positive class, multi-type, macro): 0.09548413181631432
Information Type F1 (positive class, multi-type, macro): 0.07852044320491665
Information Type Accuracy (overall, multi-type, macro): 0.8924736561291181
High Importance Information Type Precision (positive class, multi-type, macro): 0.03333333333333333
High Importance Information Type Recall (positive class, multi-type, macro): 0.05243445692883895
High Importance Information Type F1 (positive class, multi-type, macro): 0.040756914119359534
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9705215419501134
Low Importance Information Type Precision (positive class, multi-type, macro): 0.20334753700702676
Low Importance Information Type Recall (positive class, multi-type, macro): 0.10983402344547277
Low Importance Information Type F1 (positive class, multi-type, macro): 0.09110828623343568
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8664576941887866

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.1389752171692192
Information Type Recall (positive class, multi-type, macro): 0.10214199923642604
Information Type F1 (positive class, multi-type, macro): 0.060288423576782345
Information Type Accuracy (overall, multi-type, macro): 0.8932083333333334
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9962500000000002
Low Importance Information Type Precision (positive class, multi-type, macro): 0.18530028955895894
Low Importance Information Type Recall (positive class, multi-type, macro): 0.13618933231523472
Low Importance Information Type F1 (positive class, multi-type, macro): 0.08038456476904313
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8588611111111111

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.18750181254357792
Information Type Recall (positive class, multi-type, macro): 0.11664605298884638
Information Type F1 (positive class, multi-type, macro): 0.11361212200896431
Information Type Accuracy (overall, multi-type, macro): 0.8787083333333331

High Importance Information Type Precision (positive class, multi-type, macro): 0.041692213366033105
High Importance Information Type Recall (positive class, multi-type, macro): 0.09839924670433144
High Importance Information Type F1 (positive class, multi-type, macro): 0.05417983842641377
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9439166666666668
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2361050122694262
Low Importance Information Type Recall (positive class, multi-type, macro): 0.12272832175035135
Low Importance Information Type F1 (positive class, multi-type, macro): 0.1334228832031478
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.856972222222222

EVALUATION: Information Type Categorization (Multi-type)
Per Information Type Performance

Request-GoodsServices

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7612
Request-GoodsServices	0.00	0.00	0.00	22
micro avg	1.00	1.00	1.00	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.99	1.00	1.00	7634

Request-SearchAndRescue

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7624
Request-SearchAndRescue	0.09	0.10	0.10	10
micro avg	1.00	1.00	1.00	7634
macro avg	0.54	0.55	0.55	7634
weighted avg	1.00	1.00	1.00	7634

Request-InformationWanted

	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7564
Request-InformationWanted	0.00	0.00	0.00	70
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634

CallToAction-Volunteer

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7611
CallToAction-Volunteer	0.00	0.00	0.00	23
micro avg	1.00	1.00	1.00	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.99	1.00	1.00	7634

CallToAction-Donations

	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7556
CallToAction-Donations	0.75	0.23	0.35	78
micro avg	0.99	0.99	0.99	7634
macro avg	0.87	0.61	0.67	7634
weighted avg	0.99	0.99	0.99	7634

CallToAction-MovePeople

	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7527
CallToAction-MovePeople	0.00	0.00	0.00	107
micro avg	0.99	0.99	0.99	7634
macro avg	0.49	0.50	0.50	7634
weighted avg	0.97	0.99	0.98	7634

Report-FirstPartyObservation

	precision	recall	f1-score	support
Other Classes	0.94	1.00	0.97	7150
Report-FirstPartyObservation	0.00	0.00	0.00	484
micro avg	0.94	0.94	0.94	7634
macro avg	0.47	0.50	0.48	7634
weighted avg	0.88	0.94	0.91	7634

Report-ThirdPartyObservation		precision	recall	f1-score	support
Other Classes	0.96	0.98	0.97	7317	
Report-ThirdPartyObservation	0.05	0.03	0.04	317	
micro avg	0.94	0.94	0.94	7634	
macro avg	0.50	0.50	0.50	7634	
weighted avg	0.92	0.94	0.93	7634	
Report-Weather		precision	recall	f1-score	support
Other Classes	0.96	1.00	0.98	7334	
Report-Weather	0.50	0.02	0.04	300	
micro avg	0.96	0.96	0.96	7634	
macro avg	0.73	0.51	0.51	7634	
weighted avg	0.94	0.96	0.94	7634	
Report-EmergingThreats		precision	recall	f1-score	support
Other Classes	0.94	1.00	0.97	7168	
Report-EmergingThreats	0.00	0.00	0.00	466	
micro avg	0.94	0.94	0.94	7634	
macro avg	0.47	0.50	0.48	7634	
weighted avg	0.88	0.94	0.91	7634	
Report-NewSubEvent		precision	recall	f1-score	support
Other Classes	0.98	1.00	0.99	7493	
Report-NewSubEvent	0.00	0.00	0.00	141	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.49	0.50	0.50	7634	
weighted avg	0.96	0.98	0.97	7634	
Report-MultimediaShare		precision	recall	f1-score	support
Other Classes	0.86	0.93	0.89	6034	
Report-MultimediaShare	0.63	0.43	0.51	1600	
micro avg	0.83	0.83	0.83	7634	
macro avg	0.74	0.68	0.70	7634	
weighted avg	0.81	0.83	0.81	7634	
Report-ServiceAvailable		precision	recall	f1-score	support
Other Classes	0.99	0.94	0.96	7484	
Report-ServiceAvailable	0.11	0.35	0.17	150	
micro avg	0.93	0.93	0.93	7634	
macro avg	0.55	0.65	0.57	7634	
weighted avg	0.97	0.93	0.95	7634	
Report-Factoid		precision	recall	f1-score	support
Other Classes	0.87	1.00	0.93	6625	
Report-Factoid	0.64	0.05	0.10	1009	
micro avg	0.87	0.87	0.87	7634	
macro avg	0.76	0.52	0.51	7634	
weighted avg	0.84	0.87	0.82	7634	
Report-Official		precision	recall	f1-score	support

Other Classes	0.97	1.00	0.98	7404
Report-Official	0.00	0.00	0.00	230
micro avg	0.97	0.97	0.97	7634
macro avg	0.48	0.50	0.49	7634
weighted avg	0.94	0.97	0.95	7634

Report-News				
	precision	recall	f1-score	support
Other Classes	0.88	0.70	0.78	6158
Report-News	0.32	0.61	0.42	1476
micro avg	0.68	0.68	0.68	7634
macro avg	0.60	0.65	0.60	7634
weighted avg	0.77	0.68	0.71	7634

Report-CleanUp				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7560
Report-CleanUp	0.00	0.00	0.00	74
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634

Report-Hashtags				
	precision	recall	f1-score	support
Other Classes	0.50	1.00	0.66	3790
Report-Hashtags	0.00	0.00	0.00	3844
micro avg	0.50	0.50	0.50	7634
macro avg	0.25	0.50	0.33	7634
weighted avg	0.25	0.50	0.33	7634

Report-OriginalEvent				
	precision	recall	f1-score	support
Other Classes	0.88	1.00	0.94	6751
Report-OriginalEvent	0.00	0.00	0.00	883
micro avg	0.88	0.88	0.88	7634
macro avg	0.44	0.50	0.47	7634
weighted avg	0.78	0.88	0.83	7634

Other-ContextualInformation				
	precision	recall	f1-score	support
Other Classes	0.96	0.84	0.90	7364
Other-ContextualInformation	0.02	0.10	0.04	270
micro avg	0.81	0.81	0.81	7634
macro avg	0.49	0.47	0.47	7634
weighted avg	0.93	0.81	0.87	7634

Other-Advice				
	precision	recall	f1-score	support
Other Classes	0.94	1.00	0.97	7184
Other-Advice	0.00	0.00	0.00	450
micro avg	0.94	0.94	0.94	7634
macro avg	0.47	0.50	0.48	7634
weighted avg	0.89	0.94	0.91	7634

Other-Sentiment				
	precision	recall	f1-score	support
Other Classes	0.89	0.76	0.82	5844
Other-Sentiment	0.47	0.70	0.57	1790
micro avg	0.75	0.75	0.75	7634
macro avg	0.68	0.73	0.69	7634

weighted avg	0.79	0.75	0.76	7634
--------------	------	------	------	------

Other-Discussion	precision	recall	f1-score	support
Other Classes	0.92	0.93	0.93	7064
Other-Discussion	0.07	0.06	0.06	570
micro avg	0.87	0.87	0.87	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.86	0.87	0.86	7634

Other-Irrelevant	precision	recall	f1-score	support
Other Classes	0.66	1.00	0.79	5013
Other-Irrelevant	0.50	0.00	0.00	2621
micro avg	0.66	0.66	0.66	7634
macro avg	0.58	0.50	0.40	7634
weighted avg	0.60	0.66	0.52	7634